

WHAT IS CLAIMED IS:

**CLAIMS**

1. A collator comprising:

first means for selectively separating physical output from a device and  
second means coupled to said first means for angling and/or rotating said first  
means based on said physical output.

2. The collator of Claim 1 wherein said collator is a printer collator, and said  
physical output is printer output.

3. The collator of Claim 1 wherein said second means includes a controller,  
said controller including third means for generating control signals to control said  
second means to facilitate automatic positioning of said first means to selectively  
separate said physical output.

4. The collator of Claim 3 wherein said second means includes a curved  
surface in communication with one or more output trays, said curved surface and  
positions of said output trays on said curved surface controllable via a motor, said  
motor responsive to said control signals.

5. The collator of Claim 4 wherein said second means includes adjustable  
output media guides for facilitating directing said physical output into an appropriate  
output tray, and wherein said curved surface is fitted with a curved track having said  
one or more output trays positioned thereon.

6. The collator of Claim 4 wherein said second means includes a output media  
level sensor in communication with said controller, said third means generating a

control signal to said motor effective to position a different output tray in an output path when said output media level sensor indicates that an output tray currently being 5 filled is full.

7. The collator of Claim 6 wherein said output trays are positioned approximately perpendicular to said curved track and are rotatable about an axis of said track.

8. The collator of Claim 7 wherein said curved track is shaped to enable said output trays to be sufficiently rotated to expose one or more access doors, to expose other printer features, or to selectively disable said collator.

9. The collator of Claim 2 wherein said second means includes means for selectively engaging or disengaging trays included in said first means to selectively move trays into desired positions.

10. A collator comprising:

first means for accommodating output in different positions;

second means for sensing a property associated with said output and providing a signal in response thereto; and

5 third means coupled to said first means for facilitating automatic positioning of said first means in response to said signal to facilitate organization of said output.

11. The collator of Claim 10 wherein said first means includes one or more output compartments defined by one or more output trays.

12. The collator of Claim 11 wherein said third means includes means for collapsing trays associated with said first means in response to said signal to accommodate print media that is longer than the longest of said trays.

13. The collator of Claim 11 wherein said second means includes a controller in communication with software, said software allowing a user to specify a type of output.

14. The collator of Claim 13 wherein said third means includes a curved track having said one or more output trays mounted thereon, said curved track accommodating different tray positions.

15. The collator of Claim 14 wherein said third means includes a motor in communication with said curved track for selectively actuating one or more of said output trays to one or more of said different tray positions in response to said signal.

16. The collator of Claim 15 wherein said second means includes a paper level sensor mounted adjacent to said one or more output trays.

17. The collator of Claim 16 wherein said third means includes fourth means for re-directing said output to a different output tray in response to a signal output from said paper level sensor.

18. A collator comprising:  
one or more output trays;  
a track enabling varying positions of said one or more output trays; and  
means for selectively positioning said output trays about a longitudinal axis of  
5 said track to enable filling of each of said output trays.

19. The collator of Claim 18 further including means for collapsing said one or more output trays to enable output media to pass over said output trays.

20. The collator of Claim 19 further including means for sufficiently rotating said output trays about said longitudinal axis to expose access doors on an accompanying device.

21. The collator of claim 18, wherein one or more of said one or more output trays are fitted with adjustable media guides to accommodate varying widths of output media.

22. The collator of claim 21, wherein said adjustable media guides include a gear mechanism having one or more gears and/or toothed beams to facilitate positioning said media guides.

23. A system for organizing printer output comprising:  
compartments adapted to accommodate printer output media;  
a motor in communication with said compartments; and  
a controller in communication with said motor, said controller generating  
5 control signals to said motor to selectively position said compartments about a curved track to direct said printer output media into a desired one of said compartments.

24. An efficient printer capable of organizing printer output comprising:  
first means for generating an image on printer output media  
compartments adapted to accommodate said printer output media, said compartments attached to a curved track;  
5 a motor in communication with said compartments; and  
a controller in communication with said motor, said controller generating control signals to said motor to selectively position said compartments about said curved track to direct said printer output media into a desired one of said compartments.

25. A method for organizing printer output comprising the steps of:

selectively separating printer output and  
facilitating automatic nonlinear positioning of said first means about a curved  
track based on said printer output.